#### DOCUMENT RESUME

ED 357 591 EC 302 139

AUTHOR Kipling, Marsha D.

TITLE Closed-Captioning...Accessibility to Information and

Entertainment. Key Notes.

INSTITUTION Access Group, Atlanta, GA.

PUB DATE [91]

NOTE 6p.; Funds were provided by the Agent Orange

Assistance Program and United Cerebral Palsy

Associations, Inc.

PUB TYPE Information Analyses (070) -- Guides - Non-Classroom

Use (055)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Accessibility (for Disabled); \*Captions;

\*Communication Aids (for Disabled); \*Communication Disorders; \*Deafness; Federal Legislation; Hearing Impairments; Illiteracy; Limited English Speaking;

Telecommunications; \*Television Viewing

IDENTIFIERS \*Captioned Media; \*National Captioning Institute

#### **ABSTRACT**

This fact sheet provides basic information on closed captioning as a source of information and entertainment for people with hearing impairments. It describes the role of the National Captioning Institute (NCI), defines closed captioning, and notes NCI activities in three areas: development of the TeleCaption decoder, obtaining the cooperation of television networks, and finding financial sponsorship. Expansion of NCI's role into off-line captioning and real-time captioning is mentioned, and the wide range of closed caption selections now available is noted. Specific sources for the necessary decoder and additional information are given. The future of captioning and other uses of captioning (such as with limited English speaking students and functionally illiterate adults) are briefly considered. Finally, it is pointed out that equal access to electronic information is now a right under the Americans with Disabilities Act. (DB)

AP 20 AP 20



<sup>\*</sup> Reproductions supplied by EDRS are the best that can be made from the original document.

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement Office of Educational Research and improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERICI)

Office document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality

Points of view or opinions stated in this docu-ment do not necessarily represent official OERI position or policy

Closed-Captioning...Accessibility to Information and Entertainment

Key Notes

THE ACCESS GROUP 177 Peachtree Rd., N.W. Suite 310 North Atlanta, GA 30309

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."



3 77

> d Ċ?'





# CLOSED-CAPTIONING...ACCESSIBILITY TO INFORMATION AND ENTERTAINMENT

...The networks announce that there has been a plane crash in southern California. The plane has been identified as Airline Flight 503. Anyone wishing information about a passenger is asked to call their local airlines.

.."The waters of Nancy Creek have overflowed again. All those people residing in the 800 block of Walnut Avenue are asked to evacuate immediately."

..."Listen here Jackie, you better listen to your sister Roseanne..."

These are examples of information and entertainment most of the American public takes for granted. But to a segment of the population, the right of accessibility to television as a primary source of news and entertainment is a relatively new phenomenon.

The Federal Government, in 1979, created the National Captioning Institute, Inc. or NCI. NCI was charged, as a nonprofit corporation, to create "closed captioning services for deaf and hard-of-hearing people." NCI saw itself responsible for helping to make electronic information and entertainment universally available to all people.

### Just exactly what is closed captioning...

Closed-captioning is defined as the process in which the audio portion of a program is converted into written words. These words then appear at the bottom of the television like subtitles on a foreign movie. The caption portion of the definition is not particularly new as it has been used in the movie industry for years.

The concept that is new pertains to the closed part

of the definition. Even though the closed captions are broadcast along with the regular video and audio portion of the television signal, the captions are invisible to everyone except those households with a telecaption decoder. Therefore, the captions are readily available yet do not interfere with the viewing of those not needing the captions.

Closed-captioning will be a free service of the television industry supported by sponsorship

similar to the sponsorship of regular programming.

### Where to begin...

It was imperative to NCI that they begin to work in at least three key areas:

1) Develop and market the TeleCaption decoder (a machine which makes the captions closed and can be purchased by the consumer):

2) Meet with networks to determine their willingness to support the project;

3) Find financial sponsorship for the first closed-captioning.

So in 1980, NCI began offering its captioning services to the television networks with a total of 16 hours per week of captioned programming on ABC, NBC, and PBS.

Response to the new captioning efforts was very positive. A parent of two hearing impaired children commented that her children were in the 10th and 11th grades when the first captioned programs were available. She went on to say that the children were immediately interested in the power of print accom-



panying the visual display of television. She reported that what was even more encouraging, was that closed-captioning promoted interest in all print materials, particularily books, an interest she had not seen before.

#### NCI expands its role...

NCI, continued its efforts with networks and began to approach syndicated TV programmers, home video companies, and makers of commercials. It sought to expand its sponsorship base. The National Captioning Institute also sought to provide captioning-related advice to Congress. NCI researched the educational applications of captioning in hopes of expanding its base of consumers. All efforts were directed at making closed-captioning available on a much broader front, both in terms of programming and viewership.

During these years, NCI continued to refine its methods of captioning. NCI has worked in two specific captioning areas:

- 1) Off-line captioning;
- 2) Real-time captioning.

Off-line captioning employs English or journalism majors whose job it is to caption, in a clear and concise manner, pre-recorded programs. Real-time captioning employs court reporters who use an ultramodern computer which translates stenotype phonetics into English words. The availability of both kinds of captioning has allowed NCI to expand its offerings greatly.

All of these advances mean that the following closedcaption selections are available today:

- more than 450 hours of television programming weekly;
- nearly 3000 captioned movies including classics and children's movies;
- nearly 140 local station newscasts;
- 22,000 commercials a year;
- 4500 hours of captioned sports a year;
- 1000 hours of children's programming a year;
- 990 hours of cable television weekly;
- live events such as the Olympics and the President's inauguration.

## What do I need to take advantage of closed-captioning?

To receive captions in the home, TV viewers need a decoder that displays the captions on the TV screen. NCI is the sole developer, manufacturer, and distributor of the TeleCaption decoder. Decoders can be purchased arough a nationwide distribution network of over 1,000 retail locations. For a distributor in your area, you may call NCI Consumer Marketing at their toll freenumber:

1-800-533-9673 (voice) or 1-800-321-8337 (<u>Text Telephone</u>)

or by writing: National Captioning Institute, Inc. 5203 Leesburg Pike
Falls Church, Virginia 22041

NCI also has available a program which places free decoders with deserving deaf and hard-of-hearing children from economically disadvantaged homes. Questions concerning this program may be directed to the NCI toll free numbers.

### And during all those years, NCI was...

Moving ahead with offering financial and technical support for the development of the first captioning microchip, the superchip, which could be manufactured directly into television sets. And then in 1990, the Decoder Circuitry Act was passed by Congress. This law insures that all televisions manufactured to be sold in the United States, with screens 13" or larger, must be made with caption decoding circuitry included.

## And what does this all mean for the future of closed-captioning...

The Decoder Circuitry Act will become law and will go into effect on July 1, 1993. Therefore, any television set, meeting the size specifications, manufactured for sale in the United States, will have closed-captioning capacity.



The decoder (available for about \$130) will still be available for television models sold prior to July, 1993. Everyone purchasing a television model sold in the U.S. after July, 1993 should have access to closed-captioning.

Consumer problems regarding the purchase of televisions with captioning capabilities after July 1993 should be directed to NCI or local consumer advocates.

## Who else might benefit from closed-captioning?

Braille was invented for use by the military when a communication system was needed for communicating quietly in the dark. The telephone was invented in the search for a usable hearing aid. Likewise, closed-captioning may be destined to be used for needs much broader than originally intended.

Dr. Robert Davila, Assistant Secretary for Special Education and Rehabilitative Services with the U.S. Department of Education has identified "parity" as a goal of technology in the classroom. Closed-captioning has been, and is being, tried with several populations in an attempt to use technology as a parity tool. Closed-captioning is being used with: hearing impaired students, English as a Second Language (ESL) students, functionally illiterate adults, and reluctant readers.

The inderlying premise for closed caption use with all of these populations is that the captions provide what is called "comprehensible input" (Krashen, 1985). Comprehensible input can be defined as the process by which people learn language and literacy without formal instruction, using language they already know and cues from the environment.

A student using closed-captioning has the advantage of having several reading supports available including:

- the visual image;
- spoken dialogue or narration;
- printed matter in proper sentence form;
- what Dr. Robert Wilson from the University

- of Maryland Reading Center calls a convenient and dignified reading environment;
- and what many consider a stimulating learning media, namely television.

All of these support systems benefit the targeted populations in a variety of ways. More information regarding how closed-captioning specifically benefits these populations and how closed-captioning can be used instructionally can be obtained from the National Captioning Institute by writing or calling their toll free numbers.

## Other "amazing" advantages of closed-captioning...

Real-time captioning systems are being used in courtrooms. A person who experiences hearing loss as an adult may not have developed speech reading or sign language skills to a high degree. Technology has helped by providing a scripted visual image using real-time captioning enabling the viewer to read specifically each party's speech.

Schools are able to film, edit and caption video with a system costing less than \$6000. These techniques are allowing schools to develop local interest programs and share them with a much wider audience.

A hearing impaired adult reports that the most amazing aspect of closed-captioning is that she actually can watch the national and local news and understand what is going on. As an oral hearing impaired person, she says that she can generally watch a comedy or drama and follow the dialogue by watching the speaker. However, with the news, there are always "interruptions" with maps and other graphic displays, pre-recorded taped segments, or live telephone interviews... all things that interrupt the presentation of the news for a person dependent upon speechreading.

One deaf adult reports that she had never voted before the Presidential debates were captioned. She admits to never having felt a real sense of the candidate's beliefs before being able to watch and read what the candidates were saying.



Another adult deaf person reports that, finally they had felt a part of the American political system after watching their first inauguration captioned with real-life captions.

A senior adult who says "I can't quite hear what I used to" finds captions a pleasant way to continue to enjoy his/her favorite TV program.

All of these people are now able to enjoy the advantages of closed-captioning. Accessibility to electronic information is no longer just the advantage of the mainstream.

## No longer just a possibility...now it's a right

With the passage of the Americans with Disabilities Act (ADA), equal access to electronic information such as television and videos is now a right. The availability of a decoder or a television with captioning capacity at a hotel, a motel, or hospital should become a common courtesy of cred to the user of closed-captioning.

As with every right granted, responsibility follows. The "big job" confronting the consumers of closed-captioning is to help educate the public. Broadening the consumer base, soliciting support to help finance closed-captioning, encouraging vendor awareness, and in general, "spreading the word," will make the

future of closed-captioning a bright one.

#### References:

<u>Caption</u>, 1991 issue publication of the National Captioning Institute.

"Captioned TV Benefits Hearing Audiences", press release from NCI, Septemer 20, 1990.

Carney, E. (1987), "Caption decoders: Expanding options for hearing impaired children and adults, American Annals of the Deaf, 132(2), 73-77.

The National Captioning Institute, 10/91 brochure from the National Captioning Institute.

"New NCI Study Reveals that Closed-Captioned TV Helps Asians and Hispanic-Americans Learn English", press release from NCI, August 27, 1990.

"The Tools of Empowerment, From Captions to Computers, Technology Provides Educational Parity", by Kathryn Schmitz, FOCUS, National Technical Institute for the Deaf- A college of Rochester Institute of Technology, Fall, 1992.

This article was written for THE ACCESS GROUP by:

Marsha D. Kipling, Teacher of the Hearing Impaired, Atlanta Area School for the Deaf.

KEY NOTES are created by THE ACCESS GROUP to provide information about assistive technology to the families of Vietnam veterans who have children with disabilities. THE ACCESS GROUP is jointly funded by the Agent Orange Class Assistance Program and United Cerebral Palsy Associations. Inc. If you are a family member or a professional working with families of Vietnam veterans, THE ACCESS GROUP can serve as a resource to you in your efforts to obtain assistive technology. This publication is also available on audiotape. For more information call: 1-808-821-8580 (Voice, TT).

THE ACCESS GROUP 1776 Peachtree Rd., N.W. Suite 208 North Atlanta, GA 30309



n